### Poorti Sapatnekar

# THE COLLECTIVE CHOREOGRAPHY OF COOPERATION

How international organisations can drive countries, cities, companies and civil society to achieve the sustainable development goals



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# **EXECUTIVE SUMMARY**

s multi-stakeholder partnerships have grown in scope and prominence, international organisations (IOs) have become their increasingly visible proponents to deliver sustainable development and climate change goals. Significant resources are being expended based on the assumption that international organisations can cultivate effective partnerships.

Is this a valid assumption? This report presents findings and policy implications from a recent systemic study on the influence that international organisations (such as those comprising the United Nations system) have wielded in promoting partnerships on climate change — at multiple levels and across greenhouse gas-emitting sectors. The results of this study are summarised in five key findings:

# 1. Partnerships are instruments to strengthen sectoral cooperation

The prevailing approach to assessing partnerships based on their individual performance and quality is flawed. In fact, partnerships form sectoral networks among inter-connected actors, and new partnerships represent evolutionary changes to the quality of cooperation within sectors. To truly understand how well partnerships are performing, we must assess quality and growth at the sectoral level in addition to the partnership level.

# 2. Some international organisations are influencers within networks of sectoral cooperation

Many IOs participate in partnerships, but very few have become community-builders, wielding strong influence over the evolution of partnership networks within sectors. Out of more than 4,000 actors in forests, short-lived climate pollutants and land transport, nine IOs are found among the top 100 most influential actors: UNEP, World Bank, UNDP, FAO, UNFCCC, Asian Development Bank, UN Global Compact, UN Habitat and the IEA.

# 3. Collective choreography can surge growth in sectoral cooperation

Those IOs and governments with sufficient convening power and autonomy can choreograph surges in the growth of partnership, via large-scale efforts comprising six organisational attributes: strategic timing, leaders' level convening, sectoral orientation, emphasis on ambitious cooperative commitments; subsidiarity; and leadership with centralised decision-making.

# 4. Punctuated surges are insufficient to realise the potential of partnerships

Sustained and adequate institutional support is necessary for the gains of collective choreography to be impactful.

# 5. Neither secretary nor general: the UN chief is a choreographer

Of all IOs, the office of the UN Secretary-General is uniquely able to act as the choreographer to surge the strength of partnership.

### **POLICY RECOMMENDATIONS**

The key findings prompt eight policy recommendations:

- **1. Measure** the quality of partnership at the sector network level in addition to individual partnership level
- **2. Maintain** and utilise a real-time, interactive network data commons to track and spur the growth of the voluntary cooperation on climate change
- **3. Prioritise** and empower the subset of highly influential international organisations as vectors to accelerate quality of partnership
- **4. Normalise** partnership capacity across all international organisations
- **5. Align** future large-scale partnership promotion efforts with the six organisational attributes necessary to surge growth in cooperation
- **6. Institutionalise** a five-year choreography cycle to ratchet-up the strength of multi-stakeholder partnership, with coordinated annual efforts culminating in a single event at the end of each cycle
- **7. Harness** the UN secretary-general's unique ability as "choreographer" to maximise the effectiveness of each choreography cycle
- **8. Apply** collective choreography as the preferred mechanism of the United Nations System to accelerate the achievement of targeted Sustainable Development Goals

# INTRODUCTION

# THE PROMISE AND PURSUIT OF PARTNERSHIPS

"Partnership" has become a preferred operating mode in global governance. Both the Sustainable Development Goals and the Paris Agreement prioritise the pursuit of partnerships, including, in particular, *multi-stakeholder* partnerships — instances of voluntary cooperation that transcend multilateral governance by convening coalitions of countries, cities, companies and civil society actors to deliver global public goods.

This prioritisation reflects a decades-long trend in the growth of voluntary cooperation in global governance, albeit one with variable performance; some partnerships have been lauded for their success, but many have failed to deliver on their promise. Nevertheless, enthusiasm for this modality has soared, particularly to address climate change (Figure 1). Recent estimates suggest that the most ambitious partnerships have the potential to put the world on a 2°C pathway.\* Moreover, during 2016-2020, the

fragility of national government leadership for the low-carbon transition highlighted the value of pursuing more expedient routes to achieving our pressing global goals. In short, all eyes are on voluntary cooperation, and identifying the most efficient ways to scale up partnerships and ensure their effectiveness is a policy priority.

#### Growth of Voluntary Cooperation on Climate Change

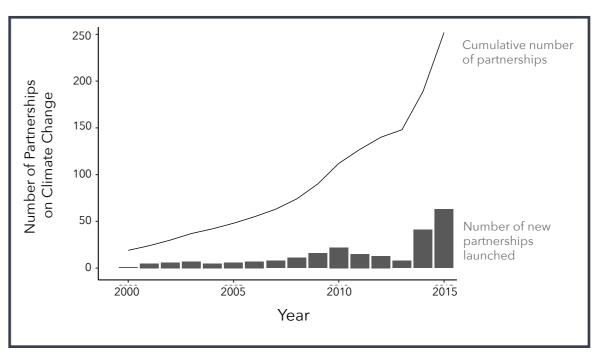


Figure 1

<sup>\*</sup> See: 'Global Climate Action from Cities, Regions and Businesses: Impact of Individual Actors and Cooperative Initiatives on Global and National Emissions' (2019) by the NewClimate Institute, Data-Driven Lab, PBL, German Development Institute, and Blavatnik School of Government, University of Oxford.

# INTERNATIONAL ORGANISATIONS AND PARTNERSHIPS

Against this context, international organisations have been closely involved in the growth of voluntary cooperation at multiple levels. First, from the "inside": IOs have instigated and supported partnerships since the 1990s by taking part themselves, as funders, secretariats or as ordinary participants. Initially pursued as ad-hoc experiments and informal endeavours, such engagement has now been institutionalised in many organisations' strategic plans. Second, from the "outside": through large-scale intergovernmental conferences, processes and summits, international organisations have heavily promoted the formation and development of multi-stakeholder partnerships without necessarily taking part in the partnerships. The conferences on sustainable development since 2002; climate summits of the UN Secretary-General; and recent conferences of Parties (COPs) to the climate convention are prominent examples of these large-scale efforts. Whether working on the inside or the outside, IOs are being looked upon to drive the growth of partnerships.

### THE KNOWLEDGE GAP

If voluntary cooperation is a priority for delivering global goals, are international organisations an effective class of actors to cultivate and accelerate its growth? If so, are all international organisations equally well-situated to do so?

Our understanding of the effectiveness of the roles played by international organisations has thus far been piecemeal. For instance, case studies consider the roles played by IOs as members, but do not account for the effect of large-scale IO efforts at the same time. Analyses of large-scale efforts have suggested an "orchestration" role by IOs but have not compared approaches taken under various efforts, nor traced the conditions under which such efforts may succeed. And no studies consider the relative importance of different IOs as members of partnerships, nor the effect of their participation on the wider growth of voluntary cooperation.\*

### THIS STUDY'S APPROACH

This study represents the first attempt to capture the systemic effects of international organisations on voluntary cooperation. It does so by considering their efforts from the inside and the outside, and their effects at multiple levels: (1) within specific partnerships; (2) on all partnerships within a sector; and (3) on the phenomenon of voluntary cooperation on climate change, comprising all partnerships on this issue, across sectors.

#### Growth: A Question of Quality and Quantity

For the purposes of this study, growth in voluntary cooperation was defined along two dimensions: an increase in the number of partnerships, and an increase in the quality of partnerships. Assessing the number of partnerships is a straight-forward counting exercise, but there are many ways to measure quality, not least the achievement of goals. However, this is not always a binary condition, and since climate partnerships are usually long-term, we often lack the *ex-post* data necessary to determine goal achievement. In lieu of this information, we can use proxy indicators of the quality of a partnership.

Lessons learned and best practices have emerged from numerous partnerships over decades, and suggest several generally applicable conditions of success of partnerships, which this study used as proxies for quality. They include: ensuring the right partners at the table; articulating specific and ambitious goals; putting in place professional and dedicated staff; securing adequate funding; being responsive to the context in which the partnership's activities are implemented; and designing a good fit with the structure of the problem.\*

#### **Painting a Holistic Picture**

With this multi-dimensional understanding of the growth of voluntary cooperation, this study focused on the period 2000-2015 and answered three specific questions.

(1) During 2000-2015, have large-scale efforts by IOs to promote partnerships across all GHG-emitting sectors *caused* the growth of partnerships? If so, how?

- (2) During 2000-2015, by participating in partnerships within specific sectors, to what degree did IOs influence the growth of voluntary cooperation in those sectors? Which IOs were most influential, and how?
- (3) During 2000-2015, how did large-scale IO efforts interact with the efforts of IOs working within specific partnerships, and what was their combined effect on the formation and quality of those partnerships?

A nested approach scoped the domain of each question. Thus, for question one, all major large-scale efforts during this period were analysed. Three GHG-relevant sectors defined the scope of question two (forests, short-lived climate pollutants, and land transport). For question three, the study focused on three significant partnerships within these sectors, and whose formation and existence coincided with at least one of the large-scale efforts (The New York Declaration on Forests; the Climate and Clean Air Coalition; and the Partnership on Sustainable, Low Carbon Transport).

# From Archives to Interviews to Dynamic Network Analysis

Several methods were used to answer these questions. They included analysis of print and digital archives; interviews with 71 individuals centrally engaged in partnerships and international organisations; and dynamic network analysis of a dataset comprising 252 known partnerships and their participants during this period.

<sup>\*</sup> See: Philip Pattberg and Oscar Widerberg. 'Transnational Multistakeholder Partnerships for Sustainable Development: Conditions for Success'. *Ambio* 45, no. 1 (1 February 2016): 42-51.

# PARTNERSHIPS AS INSTRUMENTS TO STRENGTHEN SECTORAL COOPERATION

oluntary cooperation can grow in quantity and in quality. By definition, the growth in quantity requires us to consider a group or population of partnerships. In contrast, growth in quality is usually measured within individual partnerships; as the number of partnerships has grown, practitioners have focused on tracking their individual performance over time.

The evolution of voluntary cooperation suggests that this approach is flawed. For two aspects of quality – the mix of partners and the ambition and stringency of goals – a more insightful vantage point is groups of partnerships within greenhouse gas-emitting sectors. This is because the strength of membership and goals of a given partnership are products of political, economic and social constraints and opportunities at a particular moment in time. The delineation of greenhouse gas emissions among sectors means that these parameters are determined by sector-pertinent stakeholders and conditions. As these sectoral conditions change, additional actors may be willing and able to commit, and more ambitious goals may

become feasible. This commonly results in the formation of new partnerships — a natural response to the high transaction costs of making structural alterations to existing partnerships and to the reputation-enhancing need of many actors to be seen as leading rather than following others. In other words, the act of improving quality in partnership can increase the quantity of partnerships.

The histories of voluntary cooperation in forests, short-lived climate pollutants and land transport, outlined in the following pages, illustrate this mechanism well. In all three sectors, greater ambition and broader mix of partners went hand in hand, at the sectoral level. Frequently, the formation of single-stakeholder partnerships (such as among businesses only or cities only) with relatively low ambitions was a necessary building block for the formation of multi-stakeholder partnerships with greater ambition. Equally, smaller partnerships dominated by one type of actor have been developed to advance more specific and stringent goals under the aegis of broader multi-stakeholder framework partnerships. What's more,

partnerships themselves fund and participate in other partnerships in order to advance their own goals. In other words, partnerships exist in an ecosystem with other partnerships, and the performance of one depends to varying extents on that of others as well. The locus of consequential action within a sector shifts across partnerships over the years. In short, partnerships are instruments to strengthen sectoral cooperation. Thus, rather than maintaining only a focus on individual

partnerships to measure quality of partnership, "zooming out" to a sector level can help us better understand strength of cooperation in a sector – and influence it.

### **FORESTS**

In forests, large consumer goods companies began to make commitments to reduce deforestation in the 1990s and 2000s, following highly visible pressure from

#### The Evolution of Voluntary Cooperation on Forests

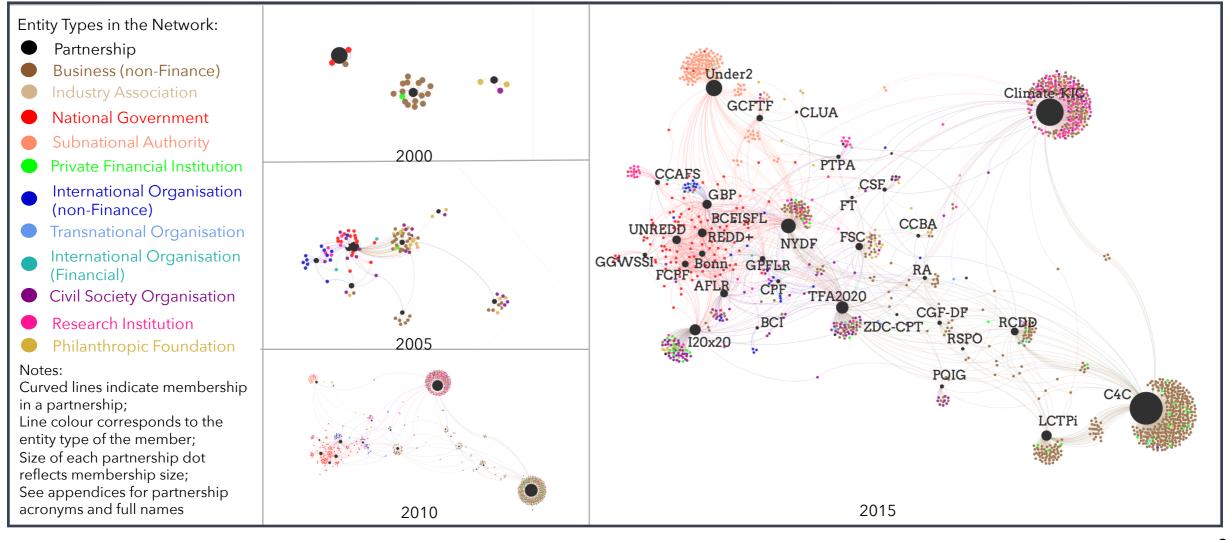


Figure 2

environmental groups and the media. Given the risk of loss of market share, these companies – competitors to each other – engaged in collaborative commitments, in effect attempting to 'move the market' while maintaining their competitiveness. Partnerships such as the Roundtable on Sustainable Palm Oil and the Consumer Goods Forum typify such attempts. Likewise, subnational authorities such as states or regions, facing common challenges and opportunities in the management of forest resources in their jurisdictions, began to collaborate, sharing lessons and making joint commitments. Given entrenched challenges to reaching intergovernmental agreement on forests in the formal arena, national governments, too, have advanced practical voluntary commitments and schemes, such as REDD+ and the Bonn Challenge.

Thus, the partnership network on forests developed as pockets of cooperation, each characterised by particular actor types working together, building trust and making joint, voluntary commitments – often experiments. By the 2010s, learnings from these partnerships had made clear that a more multi-stakeholder approach was needed. Companies, regions, national governments, NGOs and indigenous peoples hold different levers of influence pertinent to the deforestation equation and need to act together to achieve reductions in deforestation.

Multi-stakeholder partnerships such as the Tropical Forests Alliance 2020 and the New York Declaration on Forests (NYDF) reflect this recognition. The ambitious goals and broad range of stakeholders in the NYDF is in large part an amalgamation of existing partnerships on forests. As figure 2 illustrates, while many members of the NYDF are new to the network and participate only in the NYDF, many others are existing members of other, largely single-constituency, initiatives. By building on the existing partnerships consisting of particular actor types (such as national governments, governors or consumer goods companies), the NYDF represents a step towards breaking down silos, greater ambition and a more multi-stakeholder nature of partnership in forests.

# SHORT-LIVED CLIMATE POLLUTANTS

The evolution of the network on short-lived climate pollutants (SLCPs) is demarcated into two phases, with the boundary marked by the launch of the Climate and Clean Air Coalition (CCAC). During the 2000s, prior to the CCAC, the network was arguably in a tentative, experimental phase, characterised by the formation of ad-hoc initiatives targeting various SLCPs, without recognising SLCPs as a coherent sector. On the one hand, these experiments were convenings of specific actor types that saw challenges and opportunities to their core operations. For example, the Refrigerants, Naturally! initiative primarily convened multinational businesses to promote low-carbon refrigeration technology. Likewise, the Methane to Markets Partnership followed by the Global Methane Initiative typify government-led efforts on a specific SLCP. On the other

hand, this phase also included concerted efforts to promote multi-stakeholder partnerships. The Partnership for Clean Fuels and Vehicles is an example.

The launch of the Climate and Clean Air Coalition heralded the consolidation and expansion phase of the network. This is because the CCAC was largely responsible for defining SLCPs as a sector and for galvanising a core group of national governments around the issue. Although a multi-stakeholder initiative, the CCAC is characterised by strong national government participation and, indeed, was conceived as a practical way forward for national governments to cooperate in the context of difficult climate

#### The Evolution of Voluntary Cooperation on Short-Lived Climate Pollutants

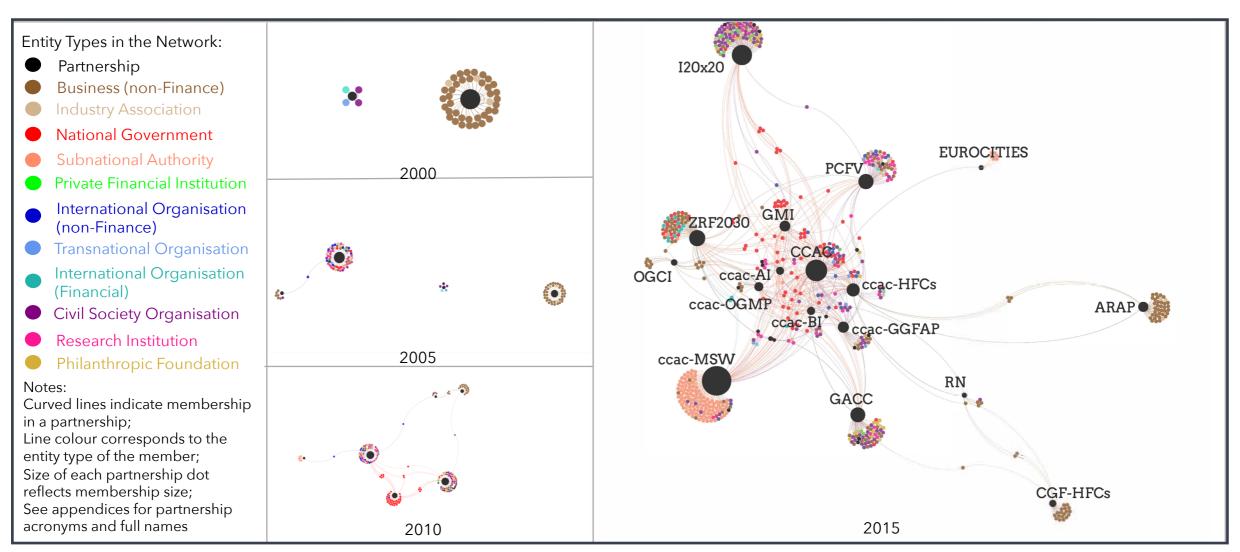


Figure 3

negotiations. The government-centred clustering is therefore a hallmark of the expansion phase of the SLCPs network.

Over the years, however, this government-led framework partnership for SLCPs has yielded specific additional initiatives that both broaden the range of partners in the network and progressively improve the level of ambition of the goals articulated. For instance, in 2012 the CCAC built a partnership between cities and national governments, and in 2014 it birthed partnerships on green freight (for the first time bringing together companies, governments and international organisations in concert) and methane (onboarding oil and gas companies into the network with new commitments to reduce gas flaring). Thus, the strength and quality of partnership has been increasing at the network level, with specific partnerships taking on single-actor or multi-stakeholder character as needed and appropriate.

### LAND TRANSPORT

The network of partnerships in the land transport sector is also characterised by two distinct phases. During the 2000s, the network began to take shape with the establishment of many initiatives, both single-stakeholder and multi-stakeholder, with two 'clusters' forming, primarily centred around businesses and cities respectively (Figure 4). Experiencing many direct and indirect effects of GHG

emissions from urban transport, including pollution with its attendant impacts on respiratory health, municipalities were increasingly motivated to undertake voluntary commitments. Transport industry associations likewise began to make commitments among their memberships.

However, these voluntary initiatives formed in a context where land transport remained largely unrecognised in the intergovernmental arena. Downplayed in the climate negotiations, governments consequently gave land transport low profile in climate finance flows such as under the Clean Development Mechanism. The complications of a distributed, end-user infrastructure and the lack of a coherent theory of change on land transport, combined with no clear lead entity to convene actors around this issue caused the rise of many disjointed partnerships during this period. Philanthropic foundations played a large part in supporting them, in effect attempting to fill the void in funding by national governments. In particular, given the projected lead role of Asia in emissions from this sector, this period saw a regional focus of partnerships, such as Clean Air Asia.

In the late 2000s, the articulation of the Avoid-Shift-Improve framework and its widespread adoption as the overarching analytical and organising theory of change marked a shift towards coherence and a period of consolidation for the land transport sector. The Partnership on Sustainable, Low-Carbon Transport (SLoCaT) played a

#### The Evolution of Voluntary Cooperation on Land Transport

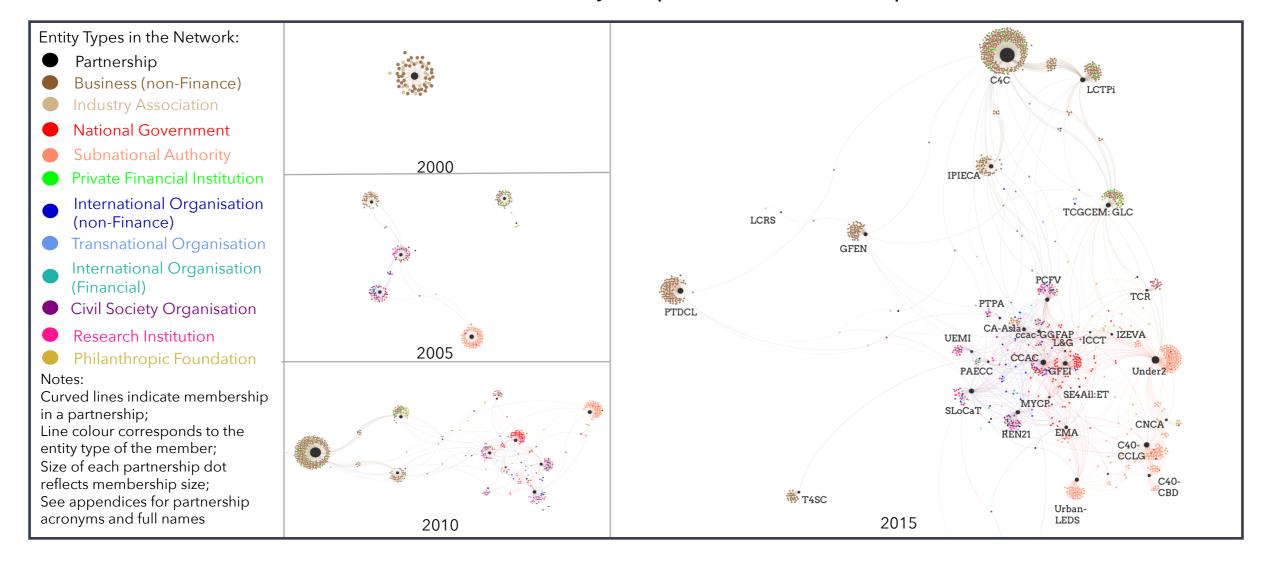


Figure 4

driving role in this regard. While Avoid-Shift-Improve was originally developed by the Wuppertal Institute as an input to the German Parliament, SLoCaT's efforts to turn this into the accepted theory of change in sustainable transport served to galvanise a diversity of actors and enabled precision and ambition in goal-setting for the sector going forward. This was a deliberate strategy and purposefully built on actors already working in the sector. With a

common agenda and clarity around goals, more ambitious partnerships have begun to emerge on land transport, such as the Transport Decarbonization Alliance.

# POLICY RECOMMENDATIONS 1 & 2

The finding that partnerships are instruments to strengthen sectoral cooperation implies a change in how we assess performance of partnerships. It demands the use of a wider aperture to measure the quality of partnership – one that allows us to consider the range of participants in all partnerships in a given sector, and the combined goals within a GHG-emitting sector.

Two policy recommendations are therefore pertinent.

# Measure the quality of partnerships at the sectoral level in addition to the partnership level

By monitoring the evolution of the sectoral ecosystem of partnerships over time, it is possible to understand whether or not cooperation among partners within a sector is improving, and how goals might be building on each other. Conversely, the continued clustering of certain actor types in the peripheries of the sectoral network (e.g. subnational authorities in the forests sector) may point to potential for improved multi-stakeholder collaboration in a sector. This could be an important rationale for steering the formation of a new partnership.

Thus, central influencers within a sectoral network, including funders in particular, should consider how a new

partnership would improve the mix of partners in a sector (whether by the type of entity they are or their geographic location, for example), or the ambition or specificity of the goals being set in the sector.

From a different perspective, entities performing a watchdog function can use these sectoral level measures to assess whether new partnerships meaningfully contribute to the growth of cooperation in the sector.

#### Maintain and utilise a real-time, interactive data commons to track and spur the growth of the partnership network on climate change

The creation of a robust data commons for the network of cooperative initiatives, that is accessible to and used by all entities engaged in cultivating the network, can serve to orient all stakeholders around a common task of strengthening the ecosystem of cooperation. The network dataset developed for this study can form the basis of such a commons; in effect, augmenting the capability and usability of current repositories such as the Climate Initiatives Platform, the Climate Action Portal and the SDGs Partnerships Database, upon which this study's network dataset is based.

# INFLUENCERS WITHIN NETWORKS OF SECTORAL COOPERATION

ut of the thousands of participants in climate partnerships, which actors have been the most influential? Are international organisations among them? To answer these questions, we need criteria for determining influence of actors in the network over time.

# CRITERIA FOR MEASURING INFLUENCE

One approach is to consider the distribution of "functions" played by actors within partnerships: funders are likely to be more influential for the formation and continuation of partnerships than ordinary participants. Secretariats are likely to hold a level of influence in between the two. Thus, if particular actors have taken up funding and secretariat roles consistently in sectoral networks, they are likely to have wielded influence in the growth of the network.

This functional approach considers the roles played by actors within particular partnerships and aggregates them

to the level of the network. A complementary approach is to consider the network as a whole, and identify which actors may hold influence. As Figure 5 illustrates, this could be done in three particular ways that are relevant for partnerships.

#### Inferring Network Influence Via Centrality Measures

Centrality Measure	Definition	Interpretation of a high score for an entity/actor in the network	Shorthand interpretation of high score
Out-degree Centrality	Number of out-going connections of a node	Being an entity that is a member of many different initiatives	An actor with a large appetite for partnerships; A prolific entity
Betweenness Centrality	Number of times a node lies on a path of shortest distance between two other nodes	Being an entity with control over information-sharing or connectivity among many others in the network	An actor that forms the connective tissue in the network; a bridge-builder
Eigenvector Centrality	Number of high-scoring connections of a node	Being a preferred partner for actors who pick their partners carefully	A highly sought-after partner; a member of the "popular" clique

Figure 5

First, we can consider an actor's "appetite" for partnerships. An entity that is a member of many different partnerships (that is, an entity with a large appetite) is likely to be more influential in the sectoral network than one that is only a member of a few partnerships.

Second, we can identify the actors which form the "connective tissue" in a network. Since the sectoral networks are characterised by pockets or clusters of partnerships, with more connections within the clusters than between them, actors that are present in multiple clusters act as "connective tissue" in the network; they are likely to play an influential bridge-building or information-sharing role between the clusters of partnerships and in connecting parts of the network.

Third, we can consider an actor's "popularity" or "attractiveness" to others. This is particularly relevant given that some entities such as businesses are risk-averse and picky when making commitments. Thus, if an actor is consistently picked as a partner by such risk-averse entities, it is likely to hold some influence over, and shape the participation of, these picky entities in the network.

By modelling the partnerships and their members as actors connected to each other in a network of memberships, this study used three centrality measures commonly used in network analysis, corresponding to the three lenses of "appetite", "connective tissue", and "popularity", to understand which actors have been most influential (see Figure 5).

### A CADRE OF INFLUENTIAL IOS

The following pages show the most influential actors in the networks on forests, SLCPs and land transport, for each of the measures of influence described above. Considering all the measures of influence together, it is clear that while over sixty international organisations have variously participated in multi-stakeholder and single-stakeholder partnerships in these three sectors, a core cadre has held particularly central and influential positions in the evolution of each sectoral network. By acting as secretariats and

#### Highly Influential IOs in the Growth of Partnership

			h	nterr	ationa	Orgai	nisatio	n				
Type of Influence (Centrality Meaure)	UNEP	World Bank	UNDP	FAO	UNFCCC	UN Globa Compa	Deve	sian Iopment Sank	UN Habitat		<sup>0</sup> Sector	ve tr
Large Appetite	FP	FSP	FS	<b>FSP</b>					S	ecretaria	t	
Connective Tissue	FP				FP		Particip		retariat 8 P	articipan	Forests	nc rti
Popular	FP							Functio	nal roles(	s) played	W	ıhl
Large Appetite	FS	FS									Short-Live	7
Connective Tissue	FS	FS									Climate Pollutants	
Popular	FS	FS									FOIIUIdilis	
Large Appetite	<b>FSP</b>	FP						FP		FP		
Connective Tissue	FSP	FP							FS		Land Transport	
Popular	<b>FSP</b>				FP	FSP						
Among top 25 "La and "Connective T centrality scores in	Tissue"	."	Func	tiona	al roles	(s) play	ed w	hile b	eing l	nighly	central	
EY: among top 100 "F centrality scores in Not among the to	n 2015	Pa	articipant	Secre	tariat	etariat &	under	Funde Partici		nder & cretariat	Funder, Secretariat & Participant	

SP

S

FP

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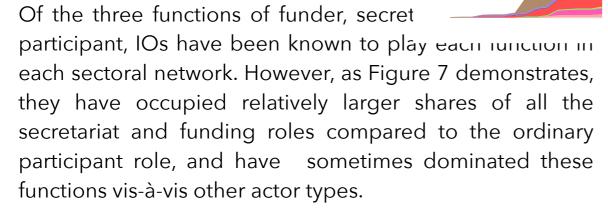
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scores in 2015

**FSP** 

funders in many initiatives; connecting previously disconnected actors; and helping picky actors build sufficient trust to make cooperative commitments, these IOs have become central actors in the sectoral partnership networks (Figure (international organisations are insectoral networks)

# FUNCTIONAL ROLES: FU SECRETARIATS & PARTI



This is particularly evident in the networks on forests and SLCPs. In Forests, IOs occupied about 19% of funding roles and 25% of secretariat roles in the forests network by 2015, but only 2% of the participant roles. In SLCPs, IOs occupied 8% of funding roles (a marked reduction of over 27% from earlier years due to a relative increase in national government funders) and 53% of secretariat roles, but consistently held only about 6% pf participant roles over the years. In land transport, this difference is narrower. 12% of all funding roles and 13% of all secretariat roles were

# Distribution of actor types by functions played in partnerships within sectors

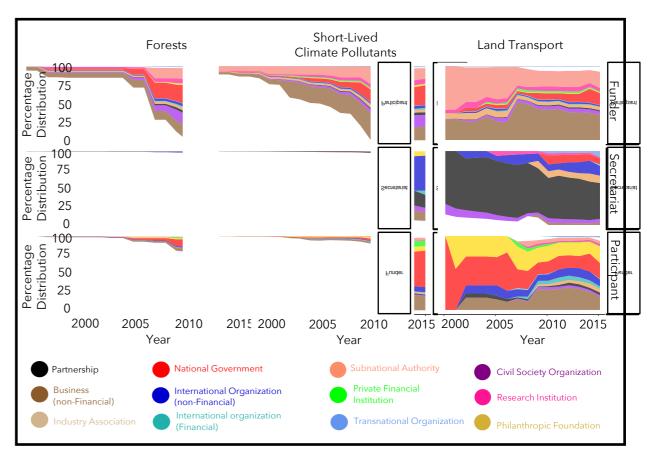


Figure 7

occupied by IOs in 2015, compared to under 2% of all participant roles.

The tendency for international organisations to take up these influential roles within partnerships more so than playing relatively passive participant roles suggests that they have been positioned as drivers in the development and sustainment of those partnerships. But which specific international organisations have been the most influential? The centrality measures help shed light on this via the three lenses of "appetite", "connective tissue" and "popularity".

# ACTORS WITH LARGE APPETITES FOR PARTNERSHIP

As figure 8 illustrates, some actors have had bigger appetites for partnerships than others. In the partnership networks on forests, SLCPs and land transport, we see that a small minority of entities has consistently engaged in the highest number of partnerships over time, in effect emerging as the most prolific group in each network.

A few international organisations are prominent in each prolific group. In forests, the World Bank, FAO, UNDP and UNEP have been among the top 25 of all actors in the number of partnerships they supported. On SLCPs, UNEP and the World Bank are among the most prolific group, with UNEP having led this group from the mid- to late-2000s, suggesting a potential galvanising role in this network during its formation stage. In land transport, the most prolific group includes five international organisations: UNEP, the World Bank, International Energy Agency, UN Habitat, and the Asian Development Bank, although some have been more consistently prolific than others.

Although each network includes several dozen international organisations, it is notable that in each, no more than 2-5 have been among the 25 most prolific actors over time. In addition, while some international organisations are prolific in specific sectors, others – notably UNEP and the World

Bank – have been prolific across the three sectors, suggesting a potential driving role in multi-stakeholder partnerships writ large.

#### The Appetite for Partnerships

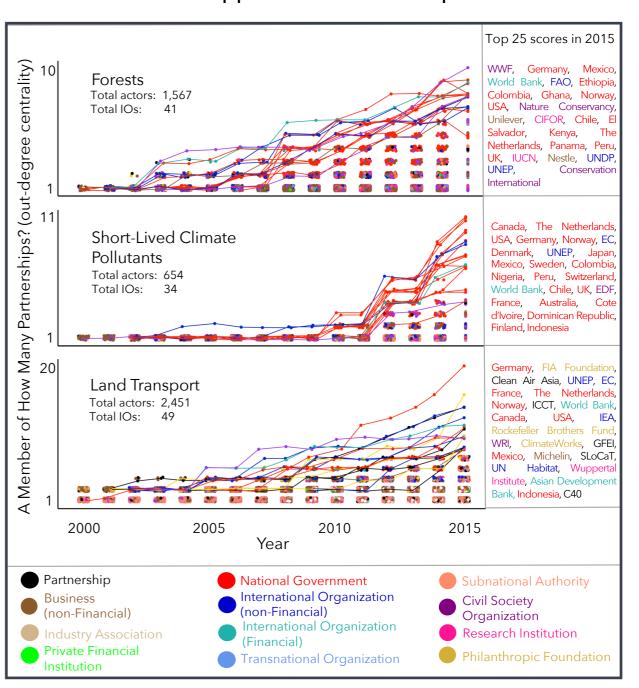


Figure 8

#### The Connective Tissue in Partnership Networks

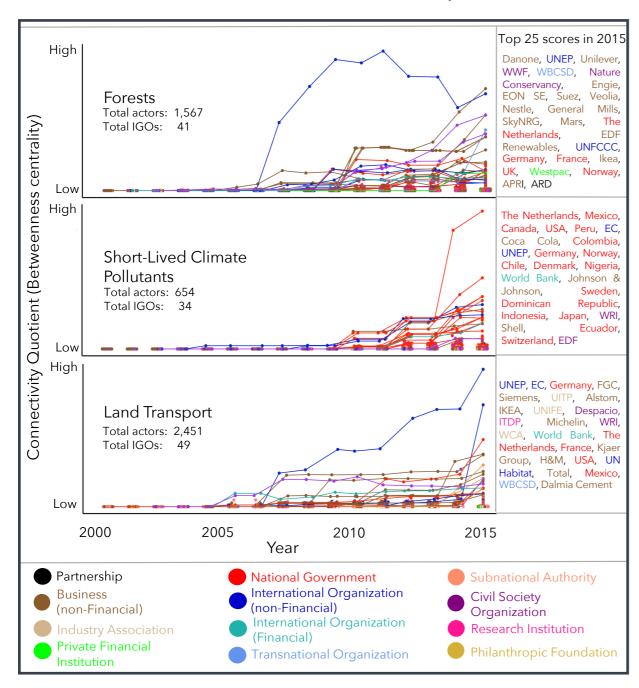


Figure 9

# THE CONNECTIVE TISSUE IN SECTORAL NETWORKS

The tendency for actors to play connective roles in each network is also characterised by the emergence of a leadership group over time in each network, although the group of highly connective actors is more diverse in each network than the group of most prolific entities (figure 9).

A select few international organisations have played highly connective roles in each network over time. Prominent among them is UNEP, which has been the single-most connective entity in the forests and land transport network since the mid-2000s and among the top three such entities in SLCPs. In addition, the UNFCCC has been highly connective in forests (followed by UNDP, UNEP and FAO, although they do not score among the top 25 actors in 2015); the World Bank in SLCPs; and UN Habitat and the World Bank in land transport.

The high scores of these international organisations suggests that they have been depended upon for strengthened connection and information-sharing by many actors in the network; in effect, building more cohesiveness in the networks. UNEP's ubiquitous and extraordinarily high connectivity across the sectors sets it apart as having potentially been a network-builder by virtue of its engagement in partnerships.

### MEMBERS OF THE POPULAR CLUB

As figure 10 illustrates, the attractiveness or popularity quotient scores show that each network has developed "inclubs", representing a group of "picky" actors that have consistently preferred to partner with each other in various initiatives over time.

In forests and land transport, leading companies within industries have sought each other out, forming tight-knit clubs. As businesses have felt compelled to make voluntary commitments, they have hedged against loss of competitiveness by making joint commitments with their competitors; in effect, shifting the market together while maintaining market shares. On SLCPs, as a low-hanging fruit on which to make practical progress on GHG emissions reductions and air pollution outside the climate negotiations, developed and developing governments have prioritised partnering with each other (albeit not as fiercely as businesses in the other two sectors); in effect, engaging in a trust-building exercise.

Most notably for this study, international organisations are a part of each of these in-clubs. UNEP on forests; UNEP and the World Bank on SLCPs; and UNEP, the UN Global Compact, and the UNFCCC on land transport.

In short, these organisations have been the preferred partners of these picky businesses and governments. For governments, the attraction has been the convenience of international organisations – instruments of their own

making – in acting as funding mechanisms and competent, neutral secretariats. For businesses, the high credibility gained through partnership with these international organisations was the basis of the attraction.

#### Popular Cliques in Partnership Networks

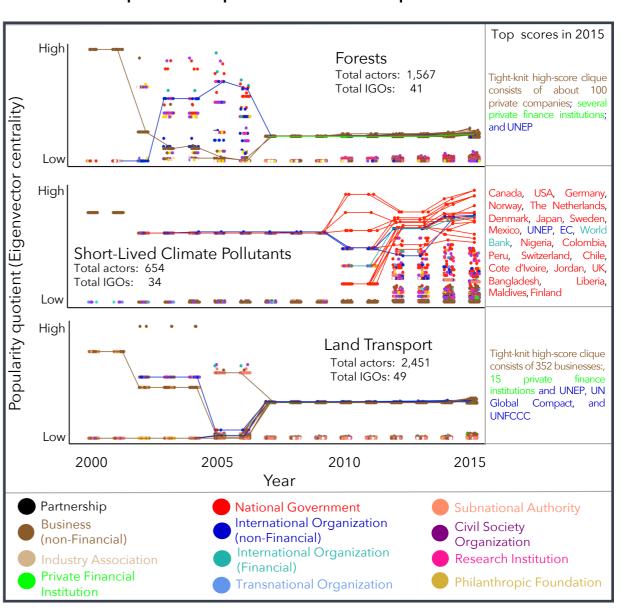


Figure 10

# POLICY RECOMMENDATIONS 3 & 4

The high centrality and influence of a subset of organisations in the networks of voluntary cooperation, together with their entrenched roles and positions in the network, entail two policy implications.

# Prioritise and empower the subset of centrally-situated international organisations as vectors of accelerated growth in the quality of multi-stakeholder partnership

Enhancing capacities of well-positioned organisations to facilitate and develop high quality partnerships would significantly help improve such cooperation in the future. In recent years, several of these central international organisations have institutionalised the pursuit of partnerships. For example, UNDP, UNEP and FAO all strongly emphasise the importance of multi-stakeholder partnership as core elements of their strategic plans for 2018-2021.

However, there is no central and coordinated effort that recognises and harnesses the uniquely influential positions held by the subset of central international organisations in partnership networks. The Executive Office of the UN Secretary-General and existing for such as the UN Development Group and the Chief Executives' Board are

all well-positioned to organise such an effort, with real-time learning that can trickle across the central organisations as well as down to others.

## Normalise partnership capacity across all international organisations

Since only a few IOs hold influential positions in the partnership networks, there is significant potential to improve the performance and valued-added of other international organisations in the networks.

The conceptual understanding of multi-stakeholder partnership varies significantly among IOs, as does their respective capacity to facilitate them. An effort by IOs to share their own knowledge of best practices among each other and develop robust partnership facilitation abilities and agility should be prioritised.

Technical IOs recognise this need – for instance, UNDP has established a global platform to support the collective capacity-building of UN System entities in this regard. Concerted support to scaling up such efforts would be invaluable to enhance the effectiveness of IOs as participants in voluntary cooperation.

# COLLECTIVE CHOREOGRAPHY: SURGING GROWTH IN COOPERATION

uring the period 2000 to 2015, a number of large-scale efforts by international organisations sought to promote voluntary cooperation on climate change and sustainable development. In this, they were working from "the outside" – that is, without necessarily taking part in partnerships themselves.

Conventional wisdom attributes the rise in partnerships during this period to these efforts. However, an examination of the archives and interviews with the variety of actors influential in the growth of partnerships during this time (that is, funders and secretariats or those who had "large appetites" or served as "connective tissue") indicates otherwise; the overall growth in the network during this time cannot be attributed to the purposive large-scale efforts by international organisations to increase such cooperation writ large. Despite appearances, very few of these efforts successfully yielded new partnerships (see Figure 11).

# Large-Scale Efforts and the Formation of New Partnerships on Climate Change

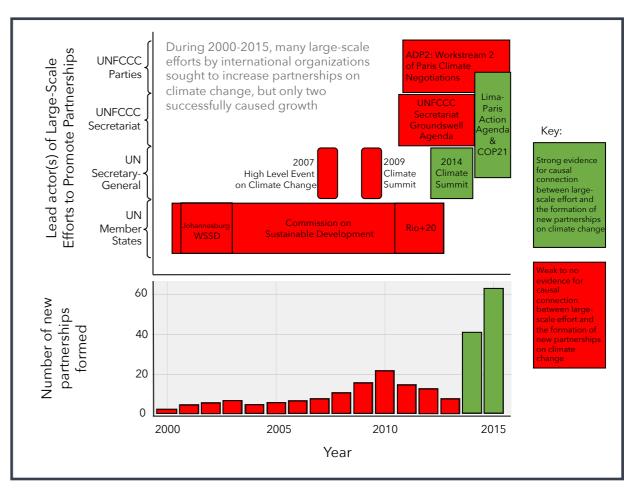


Figure 11

Rather, during these years, actors engaged in the network were primarily motivated to cooperate for other reasons: overcoming intergovernmental gridlock (e.g. partnerships led by the UK under the Gleneagles Dialogue); promoting national interests (e.g. private sector-focused efforts led by a multilateralism-averse US Administration under President Bush); a desire to reap reputational rewards and maintain competitiveness (e.g. businesses coordinating via organisations such as the WEF and WBCSD); and so on.

Against this context, the large-scale efforts of IOs failed to appreciably accelerate or further motivate these actors due to limitations in the way these efforts were organised. For instance, the 2002 World Conference on Sustainable Development, held in Johannesburg, touted 'Type II partnerships' as an official outcome, but many were in fact existing bilateral aid programmes or 'empty' partnerships that did not get funded. The few multi-stakeholder partnerships that formed in the context of the conference were due to processes outside of, and even despite, the official proceedings, within which adherence to consensus decision-making and great distrust between constituencies such as environmental organisations and businesses, or developed and developing countries, impeded the formation of partnerships. Likewise, the Rio+20 conference in 2012 was lauded as a major milestone in partnerships for sustainable development. Yet, the vast majority of voluntary announcements made were individual, not in partnership, and resulted primarily from side events and associated processes, rather than the official conference proceedings, causing one senior executive of a business organisation to remark, "At Rio+20 it became clear that the real action was in the side events. Suddenly, the official UN proceedings did not matter anymore."

However, some of these large-scale efforts, namely the 2014 Climate Summit and the Lima-Paris Action Agenda culminating in COP21, were directly successful, not only in spurring new partnerships, but also in causing the greatest surges in partnership seen during this fifteen-year period. The dozens of partnerships launched and developed under both these efforts saw significant strengthening of their respective sectoral networks, primarily by onboarding new actors and by raising the ambition of commitments.

# CONDITIONS FOR COLLECTIVE CHOREOGRAPHY

Why were some efforts so successful but not others? The answer lies in the organisational approach taken. Artful organisation can create a potent incentive structure for all types of actors to make cooperative commitments; in effect nudging them into a pipeline for cooperation. In particular, six organisational attributes have been necessary to ensure successful collective choreography.

**Strategic timing** goes a long way. If the event occurs when actors are getting increasingly motivated to make voluntary commitments, such as the run-up to an intergovernmental milestone, it capitalises on momentum

and enthusiasm for cooperation. This generates a resonance effect rather than needing to work against the grain. As well, adequate time to enable actors to do the legwork needed to forge new commitments is necessary.

When an event has **leaders-level participation**, it generates high visibility and is inherently attractive to all stakeholders who are looking to get credit for their commitments and enhance their reputations. This creates an attractive 'carrot', spurring stakeholders to participate.

The 'stick' is an **emphasis on ambitious, cooperative commitments**, such as through a vetting process and by maintaining tight control over who gets to be 'seen' and featured. This, in effect, acts as an audition process, creating a competition among actors vying to get the reputational benefit that comes with the high visibility.

With the carrot and stick established, the task is to corral the actors in a way that generates cooperation even as they are competing to improve their ambitions ("competitive cooperation"). This requires **sectoral orientation**. Rather than organising actors traditionally, by their constituency or type (for example, governments, NGOs or businesses), different actor types in a given sector are grouped together. This nudges normally adversarial actors toward cooperating around a common problem in their sector of interest, since they all have an interest in being featured at the event, and cooperating is presented as the only option to achieve this.

With actors motivated and organised within their sectors, the whole process is injected with a driving force by the principle of **subsidiarity**, whereby actors who have emerged as leaders within their sector networks (whether by being "prolific", highly "connective" and/or "attractive") are empowered to lead the process of commitment-making for the event. Thus, influential actors within a sector demonstrate subsidiarity by working with willing, less-influential actors to forge commitments on behalf of their sector at large-scale convenings. This efficiently builds on the existing network and relationships of trust.

Finally, balancing the subsidiarity, the organising entity provides **leadership with centralised decision-making**, thus making it possible to make difficult or innovative decisions as needed without resorting to a lengthy debate or consultation.

"It takes two to tango — for forty different types of actors. There is an emerging leadership community, which is starting to understand how this choreography works. You don't need to explain it to everyone. You can drive most companies by capitalising on their fear of missing out, rather than making them think more deeply on governance."

-Senior Executive, Fortune 500 company

Critically, the actors organising these processes need sufficient **convening power** and **autonomy** to put in place all six of these organisational attributes. Without the mandate or ability to convene political leaders, CEOs and civil society leaders alike, an organising actor cannot attract the decision-making stakeholders needed to ensure high visibility, nor can they demand ambitious commitments if the stakeholders do not have the requisite decision-making power. At the same time, innovative organisational elements such as sectoral orientation, reserving the right to make central decisions and choosing which organisations to empower through subsidiarity all require autonomy. This is more available to secretariats or technical agencies than to forums such as the UN General Assembly.

In short, collective choreography can surge growth in cooperation. As Figure 12 illustrates, of the many efforts by various IOs to strengthen partnerships from the "outside", most lacked one or more of the six organisational attributes. In the Johannesburg conference, the constituency-oriented convening of Major Groups entrenched distrust in attempts to build multi-stakeholder partnerships, with the G77 seeing donors as shirking their responsibilities, and environmental groups seeing the private sector as persona non grata in sustainable development. Further, the consensus-based decision-making among UN member states undermined any central leadership that could make difficult or bold decisions in light of this distrust. At Rio+20, since the conference organisers did not prioritise partnerships above individual

#### Organisational and Host Attributes of Large-Scale Efforts

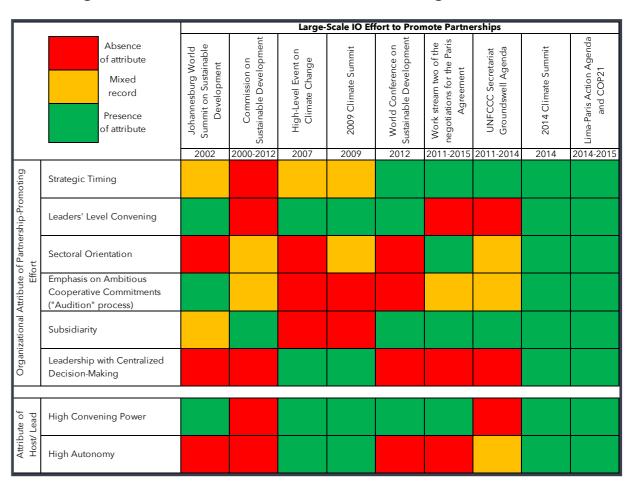


Figure 12

commitments, nor was there a particular requirement for ambition, there was an abundance of individual commitments, but relatively few cooperative commitments. The low level of autonomy available to UN DESA significantly constrained their ability to organise the process and event differently. Only the two successful efforts had all six attributes (the 2014 Climate Summit and the Lima-Paris Action Agenda culminating in COP21).

### A CLOSE-UP OF CHOREOGRAPHY

Archives and interviews with stakeholders involved in the two successful large-scale efforts indicate that the six organisational attributes were essential enablers to the commitments featured at these events, which comprised the vast majority of the partnerships launched in 2014 and 2015. The combined inside-outside effort were seen as the lynchpin of the mechanism. A deep-dive into the development and sustainment of three partnerships serves to illustrate this choreography at work.

#### **Forests**

The New York Declaration on Forests was launched at the 2014 Climate Summit, and at the time represented a significant move towards more multi-stakeholder and ambitious partnership on forests. The strategic timing and high visibility of the summit capitalised on the existing motivations of governments, lead businesses and NGOs to make commitments to support an ambitious and positive outcome of COP21. But the decision by the Secretary-General to feature a single multi-stakeholder partnership on forests compelled many different actors to work together-businesses with indigenous peoples, NGOs and governments. The vetting control held by the secretarygeneral meant that these actors underwent a one-year preparation period for the NYDF's formation, iterating over increasingly more ambitious versions of the commitment. However, the legwork of convening the various actors including consumer goods companies, indigenous "It was a very business-friendly set-up. We were invited to think in terms of stretch goals. Could we deliver by September? By 2020? It's an attractive process. Companies were saying we could bring our efforts forward and it would cost this much. Without that summit, nobody would have accelerated their efforts." - Senior Executive, member company of the New York Declaration on Forests

peoples' groups, governments and NGOs, and building sufficient trust to form the commitment, was led by established influencers within the forests partnerships network, notably UNDP, with the support of the World Economic Forum, the governments of Norway, UK and Germany, and Climate Advisors (mainly actors that held central influential positions in the network). A mutual dependency was at work: these central "inside" actors depended on the convening power and leadership of the secretary-general, while deploying their own respective influences within the network of actors on forests.

#### **Short-Lived Climate Pollutants**

The Climate and Clean Air Coalition, and its subsidiary initiatives, provides another example. In preparation for the 2014 Climate Summit, the CCAC (with UNEP as its secretariat and a central actor in the SLCPs network) led efforts to strengthen partnerships on methane emissions and in green freight. The high-level convening of the summit and its timing, as well as an action track oriented

"For all these companies to come together and make a commitment, we needed a few things. A moment in time — a year ahead of COP21. A place — where we could put pressure to launch it. A scene — which CEOs would be proud about and where they would actually be seen. And some support — the high-level support of the Secretary-General and the executive secretary of the UNFCCC. And we needed credible partners. For each initiative to be credible and to be launched, we need all of this. It is a Greek drama."

- Senior Executive, member company of the Oil and Gas Methane Partnership

around SLCPs resulted in the first coordinated multistakeholder global commitment on green freight, when actors on this issue, including governments and multinational companies, had previously acted largely within their own constituencies. On methane emissions, the office of the secretary-general and UNEP undertook a division of labour to craft the Oil and Gas Methane Partnership, with high-level officials deployed on behalf of the secretary-general to attract CEOs of oil and gas companies, and UNEP doing the legwork of crafting the commitment once high-level interest was secured. The combined leadership and subsidiarity of the outside and inside actors, with the appropriate timing, convening level, sectoral orientation and an iterative vetting process were all necessary for the expansion of this network in terms of the partner mix and the level of ambition.

Notably, the history of the CCAC reveals that the outside actor (the choreographer) need not be an IO. In fact, the formation of CCAC depended upon US government leadership and decision-making to bring on board partners and secure funding, as part of a timely strategy to advance practical action in support of the Montreal Protocol and secure what is now its Kigali Amendment. But also, it depended upon UNEP, as a central influencer in the SLCPs network, to coordinate with research institutes, NGOs and others to produce a seminal report that coined the term SLCPs (and in effect defined the sector) and made the case for immediate action in this sector, around which governments could galvanise. In addition, UNEP played a substantive role in shaping the governance of the CCAC, in particular ensuring its multi-stakeholder nature and the onboarding of non-government actors. Each needed the other for the CCAC to be formed.

#### **Land Transport**

As a long-underserved sector in the intergovernmental arena, actors in land transport have been especially motivated to seize the opportunities provided by summits and conferences, in order to raise the profile of the sector and direct political and financial resources to curbing GHG emissions. The Partnership for Sustainable, Low-Carbon Transport (SLoCaT), was conceived and founded to fill a lacuna in leadership and coordination in the sector at the global level, and since 2009 has become an established central actor in the land transport partnerships network.

Over 2014 and 2015, although not an IO, SLoCaT was recognised for the central role it had come to hold in the transport network, and was entrusted by the secretarygeneral's office and the LPAA organisers to coordinate and helped deliver several cooperative commitments. The opportunity for CEOs to share the stage with world leaders was a galvanising force for the transport industry in particular, and the sectoral orientation significantly boosted the multi-stakeholder nature of partnership in transport, which has long been characterised by silos of municipal authorities, businesses and transport ministries. The vetting process, too, pushed up the ambition of commitments, in particular helped by the long preparatory period, which enabled actors in the network to activate their own decision-making and governance processes. For example, after extensive back-and-forth with the office of the Secretary-General, the International Union for Railways agreed upon a 75% emissions reductions target for the Rail sector by 2050, which was unanimously approved by the UIC General Assembly a few months ahead of the summit.

"There was a real need, almost a desperation, by the Secretary-General's team to get non-state actors to make commitments. In the [first preparatory meeting], it was the first time we were in a room with all ministers. This was the realisation moment. We were going to have the biggest stage in the world. We were going to have to do stuff. That put it on my CEO's agenda. He put it on other CEOs' agendas."

- Senior executive, member of SLoCaT

### **POLICY RECOMMENDATION 5**

Align future large-scale partnership promotion efforts with the six organisational attributes necessary to surge growth in cooperation

The six organisational attributes necessary for success in large-scale efforts must be prioritised as a checklist by entities undertaking such efforts in the future. These attributes include: (1) strategic timing; (2) leaders' level convening; (3) emphasis on ambitious, cooperative commitments; (4) sectoral orientation; (5) subsidiarity; and (6) leadership with centralised decision-making.

Donors and supporters of such efforts should promote the adherence to such organisation in order to maximise effectiveness and to avoid wasting valuable opportunities going forward.

# THE INSUFFICIENCY OF PUNCTUATED SURGES

The choreographed surges in partnership via large-scale efforts are necessary but not sufficient to strengthen voluntary cooperation to a level commensurate with the demands of the Paris Agreement goals. Interviews with central actors in the partnership networks point to a lacuna of consistent institutional support by organisers of large-scale efforts, which has stalled or even undermined improvements in the quality of cooperation.

This has happened for two primary reasons.

First, large-scale efforts seek to create a "splash" with high visibility and leaders' level convening, which naturally causes their organisers to focus efforts on attracting new partners and improving the goal-setting in a sector over other aspects of the quality of partnership, such as monitoring and evaluation, professionalism or funding. Indeed, sometimes improvements on partners and goals occurred in part *because* of the de-emphasis on other aspects of quality such as requirements to commit funding.

Second, large-scale efforts have lacked continuity. Thus, engagement between the large-scale organiser and sectoral convenors often abruptly stops after summits, and successive summits in a series (such as those hosted by the secretary-general) have not sought to build on previous iterations. This situation has been exacerbated by a 'free for all' among various actors to lead large-scale efforts, with an ever-changing cast of empowered sectoral conveners and a 'start again' approach to building partnerships. This has resulted in relatively unproductive large-scale efforts and widespread summit fatigue among actors engaged within partnerships. This is particularly detrimental when, as the representative of one central business in the network observed, "Three percent of the work is in announcing a commitment. 97 percent of the work is in delivering it".

"These initiatives are not isolated. Excellent work is done, is funded, is seen in isolation, then falls down. You have to think about the additionality of each thread."

- Founding member of SLoCaT

The NYDF is a prime example of a large-scale effort downplaying various aspects of quality. By making the deliberate decision to not require funding commitments by governmental partners at the time of its launch, the NYDF was able to attract the support of a broad range of governments that might otherwise be put off by such an effort. Following its launch, however, little attention was paid to the implementation of the New York Declaration on Forests by the Secretary-General's office, with no M&E arrangements nor a secretariat established. This caused a loss of momentum shortly after the NYDF was launched, when the opposite was needed. Arrangements for its institutionalisation emerged following demands made by the Government of Germany and several NGOs. Neither did the 2019 Climate Summit hosted by the secretarygeneral seek to further develop the NYDF or build on it.

In short, punctuated surges are insufficient to realise the potential of partnerships.

### POLICY RECOMMENDATION 6

Institutionalise a five-year choreography cycle to ratchetup the strength of multi-stakeholder partnership, with coordinated annual efforts culminating in a single event at the end of each cycle

If multi-stakeholder partnerships are to contribute to significant greenhouse gas emissions reductions this century, a long-term strategy for their cultivation that ensures continuity is necessary. The ratchet-up cycle of the Paris Agreement offers a long-term framework with five-year increments, which could be followed for the growth of the partnership network.

Thus, rather than ad-hoc summits and conferences to promote partnerships, a 30-year timetable with summits held once every five years, and with full institutional follow-up support to partnerships in the periods between the summits can serve to inject predictability, focus efforts and strengthen the partnership networks at the level commensurate with the need.

# NEITHER SECRETARY NOR GENERAL: CHOREOGRAPHER

he need for high convening power and autonomy to accelerate growth in voluntary cooperation means that resources expended for this purpose should empower those entities that possess both. This raises the question: who has sufficient convening power and autonomy?

As Figure 12 illustrates, the only multilateral actors with the autonomy and convening power to successfully choreograph large-scale surges in multi-stakeholder partnership were the UN Secretary-General in 2014 and the President of COP21 (the Government of France), in 2015. Unsurprisingly, efforts led by member states or Parties to the climate convention were not autonomous, because by definition, decisions in these bodies are made by consensus or by voting. It's also unsurprising that the Government of France, a permanent member of the UN security council and the then-president of the climate negotiations, enjoyed some autonomy in the organisation of the COP. But the level of autonomy enjoyed by the secretary-general in hosting the 2014 climate summit goes far beyond the norm associated with international bureaucracies. And notably, even with the autonomy and convening power, the 2007 and 2009 summits of the secretary-general did not have the six organisational attributes necessary for collective choreography.

How did the UN Secretary-General acquire the autonomy to convene summits of his own accord? Why didn't this autonomy yield the six organisational attributes for choreography in all his summits? And what does this imply for future large-scale efforts?

# THE SECRETARY-GENERAL AS AN AUTONOMOUS POLITICAL ACTOR

The historical record indicates that the secretary-general's autonomy on climate change was developed over time, and built on decades of efforts by secretaries-general past, in two specific veins. First, pioneered by Dag Hammarskjold in the 1950s, the secretary-general's function as a neutral mediator among member states on issues of international security has come to be an accepted and expected source of good offices over the decades. Second, in the late 1990s and early 2000s, in response to

the tendency of mega summits to yield results of the lowest common denominator, Kofi Annan established the precedent of the secretary-general engaging in conference activism – by proactively proposing summits, their agendas and their conclusions to the General Assembly.\* The millennium summit and its MDGs, as well as its 2005 follow-up summit with the adoption of the Responsibility to Protect principle are prime examples of this approach.

# COMBINING 'GOOD OFFICES' AND CONFERENCE ACTIVISM

When Ban Ki-moon issued invitations to all leaders of the UN's member states to attend a climate summit in 2007, he was building on both these streams of effort. First, he was offering mediation, or good offices, on climate change – an issue mired in gridlock within the intergovernmental negotiations, and one that many governments at the time felt needed to be elevated from negotiators to the leaders' level. Second, he was engaging in conference activism by proposing the summit as a way to solve a specific problem. In doing so, he went one step further than his predecessor by 'skipping' the request for a resolution by the General Assembly to hold the conference, and choosing to issue the invitations himself – a first in the history of the United Nations, on any issue. Without a General Assembly resolution, the member states had no legal basis to instruct the Secretary-General on how he should run the summit. He was not beholden to them on its organisation. The 2007 High Level Event on Climate Change marked an innovative extension of the good offices function from peace and security to climate change, and a solidification of the Secretary-General's agenda-setting role in UN conferences.

In 2007 governments welcomed this offer of mediation without much protest at losing their usual decision-making authority in summitry in this bargain, largely because Ban, building on the goodwill that had been built by his predecessors, remained transparent and conservative, focusing on a mediation role between governments and earning their trust. The positive impact of this summit on the negotiations and the role played by the Secretary-General in securing the 2007 Bali Action Plan opened the door to another autonomous summit in 2009, just a few months ahead of the ill-fated COP15 in Copenhagen. Although it did not lead to a successful outcome in the intergovernmental negotiations, the Secretary-General's 2009 summit was recognised as valuable by many of the then-heads of state and government as a means to elevating the issue to the leaders' level and facilitating dialogue among them.

The conservative focus of both these summits on mediation between governments explains why they did not have the six organisational attributes. Despite rhetoric on partnerships, the events were not organised with subsidiarity or sectoral orientation in mind. They therefore did not yield any significant partnerships. Rather, their value was in establishing the precedent of the secretary-general's autonomy to operate in this space.

<sup>\*</sup> See: Andonova, Liliana B. Governance Entrepreneurs: International Organisations and the Rise of Global Public-Private Partnerships. Cambridge University Press, 2017.

### **DANCING TOGETHER**

By 2014, as a result of these efforts, the secretary-general had become established as an autonomous summit host and a climate leaders' mediator. Moreover, he also had the benefit of over a decade of learning from other large-scale efforts, including in particular Rio+20, which had made clear the importance of non-state actors and their eagerness to engage in large-scale IO efforts. Continuing the envelope-pushing tradition of interpreting the secretary-general's functions, and responding to the high demand among all stakeholders for him to play such a role, Ban hosted the 2014 Climate Summit and extended his good offices on climate change to cover non-state actors as well as member states. This was not a smooth process, and the decision to invite CEOs to share the General Assembly stage with Heads of State and Government and even speak before them, was one that required the spending of much political capital that had been shored up over the years. Yet, it was this decision, together with all the necessary organisational attributes, that yielded the sharp growth of multi-stakeholder partnership and demonstrated the potency of playing the choreographer of a collective dance among countries, companies, civil society and cities in response to climate change.

The Government of France explicitly identified the success of the 2014 Summit as the precedent to be followed, and adopted this modality for COP21, in effect delivering the second performance of collective choreography.

### POLICY RECOMMENDATION 7

Harness the UN secretary-general's unique ability as "choreographer" to maximise the effectiveness of each choreography cycle

Given the unique convening power and autonomy of the UN Secretary-General, this office should be supported to *lead* the five-year choreography cycle proposed in Policy recommendation 6, to ratchet-up strength of voluntary cooperation.

This requires addressing the sub-optimal nature of the current climate governance architecture for multistakeholder partnerships, which includes High Level Champions from UNFCCC Parties on rotating two-year appointments for the purpose of promoting climate action including partnerships. Institutionally, the high-level champions have limited convening power and autonomy, with their effectiveness highly dependent on the current COP Presidency. While it may be infeasible to discontinue the role that has been allocated to the high-level champions and the UNFCCC Secretariat, the findings of this study could be used to augment their convening power and autonomy, such as through partnership with the UN Secretary-General and specific, influential national governments - a modus operandi that was successful in the Lima-Paris Action Agenda.

# COLLECTIVE CHOREOGRAPHY: THE NEW UN SYSTEM MODUS OPERANDI?

he mechanism of collective choreography could perhaps be usefully applied for advancing voluntary cooperation to deliver global public goods other than climate change. To determine which problems are well-suited to such efforts, it is first necessary to identify the structural elements of the climate problem that have made it conducive to being addressed by voluntary cooperation and by collective choreography to advance such voluntary cooperation. Then, we must identify other global public goods that are similarly structured.

# CONDUCIVENESS TO COLLECTIVE CHOREOGRAPHY

What made climate change mitigation a viable candidate for voluntary cooperation and collective choreography? could other issue areas benefit from the same treatment? The problem structure is germane to answering this.

Climate change mitigation can be addressed by voluntary cooperation primarily because: control over many of the levers of action for reducing greenhouse gases is distributed among many actors, both state and non-state; and because economic and social benefits to non-state actors for engaging in voluntary cooperation exist or can be made to exist.

In the presence of prevailing high barriers to cooperation, the mechanism of collective choreography, via the carrot-stick combination of leaders' level convening and emphasis on ambitious, cooperative commitments, takes advantage of existing motivations among economic actors, and nudges them towards accelerated cooperation.

The three structural elements that make a problem conducive to collective choreography are, therefore: (1) distributed control over establishing the changes necessary for the solution; (2) potential for economic benefits to entities with control over delivering the solution; and (3) high barriers to cooperation among entities with control over delivering the solution. The applicability of collective choreography to other issue areas/global public goods (GPGs) depends in large part on the presence of these three elements in those problem structures.

### TYPES OF GLOBAL PUBLIC GOODS

Scholarship categorises global public goods (GPGs) into five different ideal types that reflect the structure of the response needed to deliver them.\* Climate change mitigation can be considered an aggregate effort good it can be delivered by aggregating the emissions-reducing efforts of all actors that contribute to greenhouse gas emissions. The more actors that contribute, the better the good will be delivered. By contrast, a single-best shot good can be delivered when a single actor, with the requisite capacity, takes action. It requires no collective action. The Global Positioning System, developed by the United States Government but benefitting the whole world, is an example. Another ideal type would be a weakest link good, which requires not just aggregate effort, but action by every single actor pertinent to the problem, before the good can be delivered. The eradication of diseases such as Polio falls under this category. A *coordination* GPG requires agreement by all actors to adhere to certain rules, but differs from the weakest link GPG in that actors are fully motivated. The universal postal system is an example. Finally, a *mutual restraint* GPG is delivered when all pertinent actors agree to refraining from certain actions. Nuclear non-proliferation is the prime example.

The key question, then, is which of the ideal types of global public goods have the three structural elements conducive to collective choreography.

# Types of Global Public Goods and their Conduciveness to Collective Choreography

Type of Global Public Good	Example	Distributed control over establishing the changes necessary for the solution?	Potential for economic benefits to entities with control over delivering the solution	High barriers to cooperation among entities with control over delivering the solution?
Aggregate Effort	Climate change mitigation; Ozone hole recovery; pandemic response and management	YES	YES	YES
Single Best Shot	Global Positioning System; Asteroid deflection	NO	N/A	N/A
Weakest Link	Communicable Disease Eradication	YES	YES	YES
Coordination	Global Postal System; Global maritime and aviation rules	YES	YES	NO
Mutual Restraint	Nuclear non-proliferation	YES	YES	YES

Figure 15

As Figure 15 illustrates, three ideal types of GPG are good candidates for collective choreography, as they possess all three structural elements necessary. These GPGs are the aggregate effort, weakest link as well as mutual restraint types. However, single best shot and coordination GPGs are not good candidates for choreography, since the former does not require collective action, making cooperation irrelevant for its delivery, and the latter does not face barriers to cooperation, thus demonstrating no need for collective choreography, the primary purpose of which is to lower barriers.

<sup>\*</sup> See: Barrett, Scott. Why Cooperate?: The Incentive to Supply Global Public Goods. Oxford: Oxford University Press, 2007.

### **POLICY RECOMMENDATION 8**

Apply collective choreography as the preferred mechanism of the United Nations System to accelerate the achievement of targeted Sustainable Development Goals

Many of the sustainable development goals fall under one of the three GPG categories of aggregate effort, weakest link or mutual restraint, which opens the possibility of applying collective choreography to accelerate their achievement.

For example, ending epidemics of communicable disease is a target under SDG 3, and could be categorised as an aggregate effort GPG or as a weakest link GPG, depending on whether the aim is containment or eradication. The World Health Organisation (WHO), a specialised agency of the United Nations, is responsible for coordinating the response of nation states to epidemics and pandemics. Governed by the World Health Assembly, which is composed primarily of ministers of Health, the WHO is limited in its convening power and autonomy. Pandemics require a whole-of-society approach to be adequately mitigated, with jurisdictions of not just ministries of health, but also others such as transport, finance, and food and agriculture, being pertinent to effective action. In addition, jurisdictions of subnational governments play a significant part in the policy response. Further, civil society organisations and businesses are highly influential entities, for example in shaping mass behaviours and in the development and dissemination of vaccinations. In the absence of comprehensive, coherent and effective intergovernmental leadership, the management of communicable diseases faces similar structural challenges as those presented in the intergovernmental management of climate change over the past three decades.

The development of a 'good offices' role by the UN Secretary-General on pandemics over the next decade may strengthen the ability of the intergovernmental system to respond to this challenge, and may help accelerate the growth of voluntary cooperation that is already starting to take shape on this issue.

# CONCLUSION

s instruments in service of "We the peoples", international organisations are most true to their founding ideals when engaging in the collective choreography this study described.

If the value of collective choreography can be demonstrated in other areas that demand cooperation, and if this mode of working is adequately nurtured, then the transformative value of international organisations—particularly the United Nations system—for the peoples of the world may begin to be realised.

In a zeitgeist marked by rapidly rising nationalism and retreat from international cooperation, such a role seems not an elective, but a necessity, if we are to achieve our collective aim of "better standards of life in larger freedom".

### ANNEX 1: LIST OF PARTNERSHIPS IN THREE SECTORS, 2000-2015

#### **Forests**

			Start Year	Acronym	Name
			1986	RA	Rainforest Alliance
			1990	CA	Climate Alliance
			1993		Forest Stewardship Council
			1998		Forest Trends
			2001		Collaborative Partnership on Forests
				ССВА	Climate, Community and Biodiversity Alliance
			2003	CCDA	Global Partnership on Forest and Landscape
	Forests		0000	CDELD	
rt Year	Acronym	Na	ma	GPFLR	Restoration
1986			inforest Alliance		Gold Standard Foundation
1990			mate Allia 2004		Roundtable on Sustainable Palm Oil
1993 1998	FSC FT	Fo	rest Trends	GRE.	<del>Global Bi</del> oenergy Partnership
2001				eksHipson Forests	Caring for Climate
2003	CCBA	Cl	mate, Co <b>ഉരു</b>	FOPFodiversity Allia	Forest Carbon Partnership Facility
0000	0051.0	Gl	obal Partnership 2008 storation	GGWSSI Landsc	Great Green Wall for Sahara and the Sahel Initiative
2003			old Standard Fou		
2004			undtable <b>n fig</b>		SOCIAL CARBON
2006	GBP	Gl	obal Bioenergy P Iring for Climate	artnership	
2007	C4C	Cá	ring for Climate	ONREDD	UN-REDID Programme
2008	GGWSSI		rest Carb <b>2010</b> 9	<b>் £h p H</b> acility ir Sahara and the Sahe	Governors Climate and Forests Task Force
2000	SOCIAL	5	eat Green wante	T Sanara and the Sane	Consumer Goods Forum Zero-Net Deforestation
2008			ocialcar <b>&amp;611</b> 0		Initiative
	UNREDD	1U	N-REDD P <b>20917=0</b> 1	@limate-KIC	Climate-KIC
2009	GCFTF	G	vernors Climate	and Forests Task Force orum Zero-Net Defore	Climate and Land Use Alliance
2010	CGF-DF			PTPA	Partnership on Transparency in the Paris Agreement
			mate-KIC 2010	DEDD :	REDD+
2010	CLUA	Cl			
2010	DTD A	Da	2011	_	Blue Carbon Initiative  Agreement
	BEDD+	DE	DD+		<u>-</u>
2011	BCI	Bli	ue Carbor Alfritlati	<u>Challenge</u>	Bonn Challenge - Landscape Restoration
2011	Bonn Challer	Ве	nn Challenge - L	andscape Restoration	CGIAR Research Program on Climate Change,
2011	CCIAP: CCAE	:ø.	JIAR Research Pr	ogram on Climate Cha CGIAR: CCAFS of Security	Agriculture and Food Security
2011	LEDS	Lo	w Emissic 200 bev	elopment Strategies	Low Emissions Development Strategies
2011	R4	R4	Rural Resilience	n <b>pitin</b> ative	R4 Rural Resilience Initiative
2012	TFA2020	Tr	opical Forest Allia	ice 2020 tiative for Sustainable	Tropical orest Alliance 2020
2013	BCFISFL		ndscapes	tiative for Sustainable	BioCarbon Fund Initiative for Sustainable Forest
2013	POIG	Pa	Im Oil Inn <b>oyat</b> ion	Grownce1	Landscapes
2014	400m Ha	Pr	otection of 400 n	illion Hectares of Fore POIG	
					Palm Oil nnovation Group
2014			ew York D <b>2(1)</b> a1pa4i		Protection of 400 million Hectares of Forests
	LCTPi	Lo	w Carbon Techn	scape Restoration	Initiative 20x20
	RCDD	Re	move con <b>2</b> rhobff	deforestation	New York Declaration on Forests
2015			nder2 Coa <b>շիփ</b> թի 5		African Forest Landscape Restoration
2015	ZDC CDT	Ze	ro <del>Deforestation</del> 2015 oducers and Trac	<del>Commitments from Co</del> LCTPi	Low Carbon Technology Partnership Initiative
2015	ZDC CPT	71		RCDD	Remove commodity-driven deforestation
				Under2	Under2 Coalition
			2013	0114612	Zero Deforestation Commitments from Commodity
			2045	ZD C CDT	•
			2015	ZDC CPT	Producers and Traders

#### **Short-Lived Climate Pollutants**

Start Year	Acronym	Name				
1980	ARAP	Alliance for Responsible Atmospheric Policy				
1998	ICSA	International Coalition				
		for Sustainable Aviation				
2002	PCFV	Partnership for Clean				
		Fuels and Vehicles				
2004		Refrigerants, Naturally!				
2008	EUROCITIES	EUROCITIES				
		Consumer Goods				
2010	CGF-HFCs	Forum HFC Phase-out				
		Initiative				
2010	GACC	Global Alliance for				
2010	GACC	Clean Cookstoves				
2010	CMI	Global Methane				
2010	GIVII	Initiative				
2012	CCAC	Climate and Clean Air				
2012	CCAC	Coalition				
2012	CCAC: BI	CCAC: Bricks Initiative				
2012	CCAC LIFC	CCAC: Phasing Down				
2012	CCAC: HFCs	Climate Potent HFCs				
		Mitigating SLCPs from				
2012	CCAC: MSW	the Municipal Solid				
		Waste Sector				
	0010 00515	CCAC: Global Green				
2014	CCAC: GGFAP	Freight Action Plan				
	2212 22112	CCAC: Oil & Gas				
2014	CCAC: OGMP	Methane Partnership				
2014	120x20	Initiative 20x20				
		Oil and Gas Climate				
2014	OGCI	Initiative				
		CCAC: Agriculture				
2015	CCAC: AI	Initiative				
		Zero Routine Flaring by				
2015	ZRF 2030	2030				
	l .	2030				

#### **Land Transport**

Start Year
1974 IPIECA Environmental Conservation Association 1990 CA Climate Alliance 1990 ICLEI Sustainability 2001 CAAsia Clean Air Asia 2001 ICCT International Council on Clean 2002 PCFV Partnership for Clean Fuels and Vehicles 2003 LCVP Low Carbon Vehicle Partnership 2004 TCG The Climate Group 2005 C40 CCLG C40 Cities Climate Leadership Group 2005 REN21 Ren21 2006 Walk21 Walk 21 2007 C4C Caring for Climate 2007 TCR The Climate Registry 2007 VERRA Verra 2008 EUROCITIES EUROCITIES 2008 L&G Lean and Green 2009 30X30 Res "30 by 30" Resolution 2009 GFEI Global Fuel Economy Initiative 2009 LCRS Logistics Carbon Reduction Scheme Partnership on Sustainable Low Carbon 2011 EMA EcoMobility Alliance 2011 GFEN Green Freight Asia Network 2012 CCAC Climate and Clean Air Coalition 2014 CCAC: GGFAP CCAC: Global Green Freight Action Plan 2014 LCSRTC Challenge Public Transport Declaration on Climate 2014 VFEA Vehicle Fuel Efficiency Accelerator C40 Clean Bus Declaration/Low emission vehicles 2015 CNCA Carbon Neutral Cities Alliance 2015 CNCA Carbon Neutral Cities Alliance 2015 ITS4C ITS for Climate Alliance
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2015 IZEVA Alliance
2015 LCRRTI Initiative
2015 LCTPi Low Carbon Technology Partnership
2015 MYCP MobiliseYourCity Partnership
Paris Declaration on Electromobility on
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2015 PAECC Climate Change 2015 T4SC Taxi4SmartCities 2015 Under2 Under2 Coalition

#### **ANNEX 2: THE NETWORK DATASET**

The network dataset developed for this study comprises 252 partnerships and their members, connected by virtue of membership in partnerships.

Partnerships and their members (i.e. all entities in the dataset) were defined as the nodes in the network. Membership relationships were defined as the edges in the network. For the period 2000-2015, the network consists of 6,914 distinct nodes and 11,518 distinct edges.

The network is not bimodal, as some partnerships are themselves members of other partnerships.

Data was populated for each year of a partnership's existence between 2000 and 2015, based on publicly-available information on websites and/or reports of partnerships and their members.

Nodes in the dataset were coded with two attributes: name and entity type. Edges in the dataset were coded with two attributes: relevant GHG-emitting sector(s) and functional role(s) played in the partnership.

Entity types include 14 mutually exclusive categories: National Government; Subnational Authority; International Organisation (non-Financial); International Organisation (Financial); Public Financial Institution (non-Intergovernmental); Private Financial Institution (non Intergovernmental); Transnational Organisation; Intra-National Organisation; Industry Association; Business (non-financial); Philanthropic Foundation; Civil Society Organisation; Research Institution; and Partnership.

GHG-emitting sectors include 10 mutually inclusive categories: Cities and Regions; Energy; Finance; Industry; Non-CO2 Gases; Transport and Navigation; Waste; Water; and Resilience.

Functional roles played in the partnership include 3 mutually inclusive categories: funder; secretariat; and participant.

#### **ANNEX 3: DEFINITIONS**

Entity Type	Definition used in this study
National	An entity that can represent the national governments in the international
Government	sphere (e.g. a line ministry, President's office, parliament, supreme court, etc)
Subnational	Any entity that represents a local government such as a town, city, state,
Authority	province. May be legislative, executive, or judiciary
International	An organisation established by national governments, membership-
Organization	based, but not a financial institution. E.g. African Union, United Nations,
(non-Financial)	ASEAN.
International	
Organisation	Multilateral or National Development Bank or a Fund
(Financial)	
Public Financial	Public organisation engaged in financial services, with or without a
Institution	development/climate objective, typially established by a national
insutution	government or subnational authority (not multilateral)
Private Financial	A business engaged in financial services, with or without a
Institution	development/climate objective
Transnational	Global-level membership-based organization (collects dues) established
	for a specific purpose. Membership is not limited to governments or
Organization	industries only. E.g. World Economic Forum
	National-level membership-based organization (collects dues from
Intra-National	members) established for a specific purpose. Membership need not be
Organization	limited to specific industries only and neither does it need to be limited
	to specific industries.
	Membership-based organization (collects dues from members)
Industry	established for a specific purpose, but not by governments, limited to
Association	specific industries; high likelihood of lobbying and advocacy efforts;
	standard-setting; issuing industry reports; acting as governing body
Business (non- financial)	Profit-making company or companies (not financial services)
Philanthropic	foundation that provides funds for specifed charitable purposes (not
Foundation	governmental)
Civil Society	Not profit-seeking; depends upon donations (from organisations or
1	general public)and fund-raising; largely independent from national
Organization	government
Posoarch	An academic research centre, whether a think tank, higher education
Research Institution	entity etc. (but not a school or college in which research is not conducted
	as main purpose)
Dartnarah: a	A partnership on climate change cooperative; voluntary; horizontal (non-
Partnership	hierarchical); participatory governance; global in scope

#### **ANNEX 4: SELECT SOURCES**

Abbott, Kenneth. 'The Transnational Regime Complex for Climate Change'. *Environment and Planning C: Government and Policy* 30 (2012): 571-90.

——. 'Orchestration: Strategic Ordering in Polycentric Governance'. In *Governing Climate Change: Polycentricity in Action?*, edited by Andrew J. Jordan, Dave Huitema, Harro van Asselt, and Johanna Forster. Cambridge: Cambridge University Press, 2018.

Abbott, Kenneth W., Philipp Genschel, Duncan Snidal, and Bernhard Zangl. *International Organisations as Orchestrators*. Cambridge University Press, 2015. https://asu.pure.elsevier.com/en/publications/international-organisations-asorchestrators.

Andonova, Liliana B. Governance Entrepreneurs: International Organisations and the Rise of Global Public-Private Partnerships. 1st ed. Cambridge University Press, 2017. https://doi.org/10.1017/9781316694015.

Andonova, Liliana, and Marc Levy. 'Franchising Global Governance: Making Sense of the Johannesburg Type II Partnerships'. In *Yearbook of International Cooperation on Environment and Development*, 19–31. London: EarthScan Publications, 2003.

Avant, Deborah, Martha Finnemore, and Susan Sell. *Who Governs the Globe?* Cambridge, 2010. https://doi.org/10.1017/CBO9780511845369.

Bäckstrand, Karin, and Mikael Kylsäter. 'Old Wine in New Bottles? The Legitimation and Delegitimation of UN Public-Private Partnerships for Sustainable Development from the Johannesburg Summit to the Rio+20 Summit'. *Globalizations* 11, no. 3 (4 May 2014): 331-47. https://doi.org/10.1080/14747731.2014.892398.

Barnett, Michael, and Martha Finnemore. Rules for the World: International Organisations in Global Politics. Ithaca, NY: Cornell University Press, 2004.

Barrett, Scott. Why Cooperate?: The Incentive to Supply Global Public Goods. Oxford: Oxford University Press, 2007.

Bleisham, M, and A Liese. Transnational Partnerships: Effectively Providing for Sustainable Development? Basingstoke: Palgrave Macmillan, 2014.

Blok, Kornelis, Niklas Höhne, Kees van der Leun, and Nicholas Harrison. 'Bridging the Greenhouse-Gas Emissions Gap'. *Nature Climate Change* 2 (July 2012).

Borgatti, Stephen P., Ajay Mehra, Daniel J. Brass, and Giuseppe Labianca. 'Network Analysis in the Social Sciences'. *Science* 323, no. 5916 (13 February 2009): 892-95. https://doi.org/10.1126/science.1165821.

Bulkeley, Harriet, Liliana Andonova, Karin Bäckstrand, Michele Betsill, Daniel Compagnon, Rosaleen Duffy, Ans Kolk, et al. 'Governing Climate Change

Transnationally: Assessing the Evidence from a Database of Sixty Initiatives'. *Environment and Planning C: Government and Policy* 30 (2012): 591-612.

Cashore, Benjamin. 'Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority'. *Governance* 15, no. 4 (2002): 503-29. https://doi.org/10.1111/1468-0491.00199.

Chan, Sander, Clara Brandi, and Steffen Bauer. 'Aligning Transnational Climate Action with International Climate Governance: The Road from Paris'. *Review of European, Comparative & International Environmental Law* 25, no. 2 (1 July 2016): 238-47. https://doi.org/10.1111/reel.12168.

Chesterman, Simon. 'Article 99'. In *The Charter of the United Nations: A Commentary*, by Bruno Simma, Daniel-Erasmus Khan, Georg Nolte, and Andreas Paulus. Oxford University Press, 2012.

CISL, and Ecofys. 'Better Partnerships: Understanding and Increasing the Impact of Private Sector Cooperative Initiatives'. Cambridge, 2015. https://www.ecofys.com/files/files/ecofys-cisl-2015-wtg-better-partnerships.pdf.

Claude, Inis L. 'Peace and Security: Prospective Roles for the Two United Nations'. *Global Governance* 2, no. 3 (1996): 289–98.

Du, Donglei. 'Social Network Analysis: Centrality Measures'. Accessed 9 September 2020. http://www2.unb.ca/~ddu/6634/Lecture\_notes/ Lecture\_4\_centrality\_measure.pdf.

Eliasch, Johan, Great Britain, and Office of Climate Change. 'Climate Change: Financing Global Forests.' London: TSO, 2008.

GGCA. 'Lima-Paris Action Agenda Independent Assessment Report'. Galvanising the Groundswell of Climate Actions, 7 December 2015.

Green, Jessica F. 'Order out of Chaos: Public and Private Rules for Managing Carbon'. *Global Environmental Politics* 13, no. 2 (May 2013): 1–25. https://doi.org/10.1162/GLEP\_a\_00164.

Group of Eight. 'Gleneagles Plan of Action'. Government of the United Kingdom, 5 March 2008. webarchive.nationalarchives.co.uk. https://webarchive.nationalarchives.gov.uk/20080305153210/http://www.berr.gov.uk/energy/policy-strategy/international/g8/page28073.html.

Guerra, Flavia, Marija Isailovic, Oscar Widerberg, and Philipp Pattberg. 'Mapping the Institutional Architecture of Global Forest Governance'. Technical Report. IVM Institute for International Studies, 7 May 2015.

Hafner-Burton, Emilie M., Miles Kahler, and Alexander H. Montgomery. 'Network Analysis for International Relations'. *International Organisation* 63, no. 3 (July 2009): 559-92. https://doi.org/10.1017/S0020818309090195.

Hale, Thomas, and Charles Roger. 'Orchestration and Transnational Climate Governance'. *The Review of International Organisations* 9, no. 1 (1 March 2014): 59-82. https://doi.org/10.1007/s11558-013-9174-0.

Hsu, Angel, Andrew S. Moffat, Amy J. Weinfurter, and Jason D. Schwartz. 'Towards a New Climate Diplomacy'. Comments and Opinion. Nature Climate Change, 21 May 2015. https://doi.org/10.1038/nclimate2594.

Johnstone, Ian. 'The Role of the UN Secretary-General: The Power of Persuasion Based on Law'. *Global Governance* 9, no. 4 (2003): 441–58.

Jordan, Andrew J., Dave Huitema, Harro van Asselt, and Johanna Forster. *Governing Climate Change: Polycentricity in Action?* Cambridge: Cambridge University Press, 2018. https://doi.org/10.1017/9781108284646.

Kaul, Inge, and Pedro Conceição. *The New Public Finance: Responding to Global Challenges. The New Public Finance*. Oxford University Press. Accessed 8 September 2020. https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780195179972.001.0001/acprof-9780195179972.

La Vina, Antonio G. M., Gretchen Hoff, and Anne Marie DeRose. 'The Outcomes of Johannesburg: Assessing the World Summit on Sustainable Development'. *SAIS Review* 23, no. 1 (2003): 53-70. https://doi.org/10.1353/sais.2003.0022.

Michaelowa, Katharina, and Axel Michaelowa. 'Transnational Climate Governance Initiatives: Designed for Effective Climate Change Mitigation?' *International Interactions* 43, no. 1 (January 2017): 129–55. https://doi.org/10.1080/03050629.2017.1256110.

New Climate Economy. 'Better Growth, Better Climate: The New Climate Economy Report'. The Global Commission on the Economy and Climate, September 2014. http://newclimateeconomy.report/2014/misc/downloads/.

NewClimate Institute, Data-Driven Lab, PBL, German Development Institute, and Blavatnik School of Government, University of Oxford. 'Global Climate Action from Cities, Regions and Businesses: Impact of Individual Actors and Cooperative Initiatives on Global and National Emissions', 2019.

NYDF Assessment Partners. 'NYDF Progress Report 2015', November 2015. https://forestdeclaration.org/images/uploads/resource/2015NYDFReport.pdf.

Ostrom, Elinor. 'Beyond Markets and States: Polycentric Governance of Complex Economic Systems'. *The American Economic Review* 100, no. 3 (2010): 641-72.

Parmentier, Rémi. 'Lessons from Johannesburg: What Is the Future for UN Summits?', 10 September 2002. https://enb.iisd.org/wssd/infonews10(E).html#3.

Pattberg, Philipp H., Frank Biermann, Sander Chan, and Aysem Mert. Public-Private Partnerships for Sustainable Development: Emergence, Influence and Legitimacy. Edward Elgar Publishing, 2012.

Pattberg, Philipp, and Oscar Widerberg. 'Transnational Multistakeholder Partnerships for Sustainable Development: Conditions for Success'. *Ambio* 45, no. 1 (1 February 2016): 42–51. https://doi.org/10.1007/s13280-015-0684-2.

Ramstein, Céline. 'Rio+20 Voluntary Commitments: Delivering Promises on Sustainable Development?' *IDDRI* 23, no. 12 (December 2012): 28.

Schechter, Michael G. *United Nations Global Conferences*. London and New York: Routledge, 2005.

Slaughter, Anne-Marie. *A New World Order*. Princeton and Oxford: Princeton University Press, 2004. https://press.princeton.edu/titles/7712.html.

Stigson, Björn. 'A Business Perspective on Partnerships'. In *Progress or Peril? The Post-Johannesburg Agenda*, 4. Washington, D.C.: Global Public Policy Institute, 2003.

Stuart, Mark Moody. 'Power of Partnerships'. BASD, 4 September 2002. http://basd.free.fr/docs/speeches/20020909\_mms.html.

UN DESA. 'Voluntary Commitments and Partnerships for Sustainable Development'. United Nations, July 2013. https://sustainabledevelopment.un.org/content/documents/

930Report%20on%20Voluntary%20Commitments%20and%20Partnerships.pdf.

UNEP & WMO. 'Integrated Assessment of Black Carbon and Tropospheric Ozone'. United Nations Environment Programme (UNEP) and World Meteorological Organisation (WMO), 2011.

Vinuales, Jorge E. 'Can the UN Secretary-General Say "No": Revisiting the "Peking Formula", n.d., 32.

WEF. 'A Message from the Friends of Rio+20'. World Economic Forum, 2012. https://www.circleofblue.org/wp-content/uploads/2012/06/A-Message-from-the-Friends-of-Rio+20.pdf.

WEF, and WBCSD. 'CEO Climate Policy Recommendations G8 Leaders', July 2008. https://www.hochtief.de/hochtief/mmdbdownload?id=139353&format=4.

Weiss, Thomas G., Tatiana Carayannis, and Richard Jolly. 'The "Third" United Nations'. *Global Governance* 15, no. 1 (2009): 123-42.

Widerberg, Oscar. 'Making the Connections: Exploring Structure, Performance and Coordination in a Fragmented Global Climate Governance System', 2017.

---. 'The "Black Box" Problem of Orchestration: How to Evaluate the Performance of the Lima-Paris Action Agenda'. *Environmental Politics* 26, no. 4 (4 July 2017): 715–37. https://doi.org/10.1080/09644016.2017.1319660.

Williams, Abiodun. 'Strategic Planning in the Executive Office of the UN Secretary-General'. *Global Governance* 16, no. 4 (2010): 435-49.

# **ABOUT THE AUTHOR**

Poorti Sapatnekar completed her PhD in Policy Studies at the University of Maryland School of Public Policy in October 2020. Her dissertation, entitled "Did Intergovernmental Organisations Drive the Growth of Voluntary Cooperation on Climate Change?", is summarised in this policy report.

Poorti previously worked at the United Nations, as part of the UN Secretary-General's Strategic Planning Unit and Climate Change Support Team. Prior to this, Poorti worked in the office of the UN Resident Coordinator in Indonesia, coordinating efforts for the UN to 'Deliver as One' in support of the Government of Indonesia's priorities on post-tsunami and post-conflict recovery, disaster preparedness, big data and innovation, climate change, and development. In addition, Poorti has worked for NGOs in Sri Lanka and Rwanda to promote grassroots recovery in post-conflict situations.

Poorti also holds a Master's degree in Development Studies from the School of Oriental and African Studies (SOAS), University of London; and a Bachelor's degree in Natural Sciences from Cambridge University.

p.sapatnekar@gmail.com

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